

# BEAUFORT REGION COMMUNITY LEADERS FORUM ON SHORELINE CHANGE

## Meeting Notes

June 22, 2009 – 2:00pm-5:00pm

This document is not intended to be a meeting transcript, *per se*. It is a summary of key themes and some (though not all) of the background dialogue. The meeting summary's structure roughly parallels that of the meeting agenda but is not necessarily true to the temporal order of discussion.

### **In Attendance:**

#### *1) Forum attendees:*

ACE Basin NERR	Rebekah Szivak
Beaufort County	Amanda Flake Paul Sommerville
Beaufort / Port Royal Joint Planning Commission	Harley Laing
Beaufort Regional Chamber of Commerce	Blakely Williams
Daufuskie Island Conservancy	John Ferguson Paul Hearty Tony Simonelli Laura Winholt
Friends of Hunting Island State Park	Vivian Wayne Alan Welch Bonnie Wright
Fripp Island POA	Kate Hines
Harbor Island Owners Association	Mary Boykin Mark Harbaugh Debra Hoffman
Hilton Head Island – Forest Beach POA	Jack Daly
Hilton Head Island – Palmetto Dunes POA	Jim Gant Tim Johnson
Hilton Head Island – Port Royal Plantation	Dan Davis Will Dopp
Hilton Head Plantation POA	John Ealers T. Peter Kristian
Hunting Island Beach Preservation Association	Rob Rettew
Lowcountry Council of Governments	Chris Bickley Matthew Brady
Lowcountry & Resort Island Tourism Commission	Jim Wescott
S.C. House District 124 Representative	Shannon Erickson
S.C. Sea Grant Consortium	Jessica Whitehead
S.C. State Park Service	Ray Stevens

Seaside Getaways	Greta Maddox
Sligh Environmental Consultants	Rocky Browder
Town of Edisto Beach	Iris Hill
	Patrick Brown
Town of Hilton Head Island, Chamber of Commerce	Ray Deal
Town of Port Royal	Linda Bridges

2) *Shoreline Change Advisory Committee members:*

Hamilton Davis,	S.C. Coastal Conservation League
Rick DeVoe,	S.C. Sea Grant Consortium
Jill Foster,	Town of Hilton Head Island
Fran Way,	Applied Technology and Management – <i>alt. for Chris Mack</i>

3) *S.C. Department of Health & Environmental Control:*

Braxton Davis,	OCRM Policy & Planning Director
Marvin Pontiff,	OCRM Assistant Deputy Commissioner
Barbara Neale,	OCRM Regulatory Director
Curtis Joyner,	OCRM Coastal Projects Manager
Blair Williams,	OCRM Wetland Permitting Section Manager
Matt Slagel,	NOAA Coastal Management Fellow

**Welcome / Overview of Shoreline Change Advisory Committee:**

Braxton Davis, Director of DHEC-OCRM's Policy & Planning Division, provided a brief overview of the Shoreline Change Initiative and the purpose of the Advisory Committee. To date, there have been two orientation meetings focused on OCRM authorities and activities, the Committee work plan and process, and shoreline management in other states. The Committee has also examined research and information needs, and South Carolina's policies concerning retreat, beach renourishment, beachfront erosion control, and local beach planning.

Essentially, we've held a series of meetings to "brainstorm" ideas and issues related to beachfront and estuarine shoreline research and management, and we've asked volunteer subcommittees of the full committee to draft "policy options" that explore different ideas that have been generated thus far. These initial ideas and subcommittee lists can be found in the approved meeting minutes on the SCAC website at the following link: ([http://www.scdhec.gov/environment/ocrm/science/shoreline\\_comm.htm](http://www.scdhec.gov/environment/ocrm/science/shoreline_comm.htm))

The purpose of this initiative is to explore, in-depth, South Carolina's past experiences and continuing needs related to shoreline management in the coastal zone. To do so, we'll need significant public participation, and we're trying to provide a number of opportunities. In addition to the public comment periods at each Committee meeting, and general public

hearings, we'll accept written comments at any time, and the draft report will be circulated widely for public comment. We'll also include all public comments on the draft report in an appendix of the final report.

At this stage, the Committee has been exploring different policy options, but the policy options have not been finalized and any of them may be dropped, changed, or added at any time in the coming months. Completion of the Committee's Draft Report is anticipated in late September 2009, with a tentative Final Report release of Fall 2009.

Dr. Davis' presentation can be found at the following link:  
([http://www.scdhec.gov/environment/ocrm/science/shoreline\\_comm\\_062209.htm](http://www.scdhec.gov/environment/ocrm/science/shoreline_comm_062209.htm))

### **Break-Out Session Results:**

*We have attempted to identify areas of apparent consensus among participants (underlined), but in most cases simply relay the suggestions of one or more individuals or break-out groups. Since no votes were taken, each suggestion described below could be a minority OR majority opinion.*

### **Question 1:**

*Are South Carolina's beach and dune systems healthier today than in 1987? Are beachfront communities more or less threatened by shoreline changes today than they were two decades ago?*

### **Some attendees suggested that:**

- The "health" of beach and dune systems is difficult to define. Should health be defined according to:
  - Sufficient sand supplies?
  - Presence of dune systems?
  - Abundant habitat?
  - Diversity of systems?
  - Ability to support economic and recreational activities?
- It is difficult for many to determine if the beach and dune systems are healthier today than in 1987 because few of the forum attendees have been in the state for over 20 years, and this is true for a large percentage of the coastal population in this region.
- The beach and dune systems are healthier today than in 1987 due to:
  - Sand fencing, dune planting, and other active beach management approaches
  - Enhanced public awareness
  - Beach nourishment projects
    - Some attendees question whether a renourished beach should be considered a healthy beach.

- The beach and dune systems are less healthy today than in 1987 due to:
    - Fewer and smaller dune systems and less vegetation
    - Insufficient public access for increased coastal population
    - Continued development too close to the beach/dune system, which restricts natural migration of the shoreline
  
  - The forum attendees generally agreed that beachfront communities are *more threatened* by shoreline changes today, and some reasons that were suggested included:
    - There are more people living along the coast and more money invested in buildings and infrastructure than 20 years ago, and these communities are continuing to grow.
    - Funding and sand resources for beach renourishment could decrease in the future.
    - Storm surge and sea level rise could flood/inundate low lying areas more frequently or dramatically.
    - Insurance programs continue to allow development and redevelopment in high risk areas.
  
  - Healthier beaches are generally found in areas where beach planning has been proactive rather than reactive.
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**Question 2:**

***Is renourishment sustainable as a long-term solution to beach erosion/shoreline migration in South Carolina?***

- a) ***What are your concerns about sediment supplies, financial support, accelerated sea level rise, and/or the severity and frequency of storms and erosion events?***
- b) ***What temporary erosion control measures (e.g. sand bags) should be allowed to provide time for renourishment projects (or natural accretion), under what circumstances, and for how long?***
- c) ***Some erosion control solutions that involve alterations to nearshore features (e.g. nearshore borrow sites, inlet relocations, groin fields, breakwaters) can cause negative impacts on adjacent or “downstream” beaches. How should the state manage these potential impacts, and what is the relative role of local and state government?***

**Some attendees suggested that:**

- Beach renourishment could be unsustainable in the long-term due to sea level rise impacts, but it is sustainable in the mid-term in terms of sand availability.
- Economics will drive the sustainability of beach renourishment, and there is a need for heightened state and federal commitment to maintain renourishment based on the economic benefits that these projects provide.

- Local communities need more guidance and support from the state to determine when renourishment is no longer an economical erosion mitigation option for a particular beach.
- Some offshore and nearshore borrow sites may be reusable, but others may not if they refill with non-beach-compatible material. Because of this, some attendees suggested that renourishment will be more and more expensive in the future as suitable borrow sites become scarce.
- The costs of offshore dredging and pumping for renourishment are very expensive in part because there are so few dredging companies available to do the work. The state should consider purchasing its own dredge to lower the costs associated with renourishment.
  - e.g. North Carolina operates its own dredge for its ferry system.
- Some beach communities can use the local tax base to help fund renourishment projects, but others must rely more on state and federal funding.
  - The allocation process for state and federal funding should consider these factors.
- The state should consider creative mechanisms to raise more money for renourishment projects, which in turn would increase tourism revenue.
  - Interstate tolls leaving South Carolina, for example.
- Sea level rise is a contributor to beach erosion, but it is not an immediate threat and therefore should not be planned around. Beach management and planning should be done for those threats and impacts that are known, rather than those that are uncertain.
- Some participants suggested that new erosion control structures such as seawalls and revetments should be allowed along the beachfront under certain circumstances and after case-by-case reviews; and that there should not be an outright prohibition on these structures;
  - And some participants suggested that existing erosion control structures should be allowed to be repaired, even if damaged more than 50%.
- Sandbags need to be considered on a site-specific basis since they may work well in some places but not in others.
  - Better enforcement is needed for erosion control structures or sandbags that either were not permitted or are not functioning as designed.
  - Sandbag design and siting standards need to be re-evaluated to ensure that there are no adverse impacts – including size, placement, material
- Post-project monitoring is beneficial and needs to continue following all renourishment or other beach alteration projects.

- “Soft” erosion control solutions such as sand fencing and dune planting and fertilizing should be more strongly encouraged and facilitated by OCRM.
  - Potential impacts from beach projects and dredging activities need to be sufficiently studied and understood before work begins.
    - Jasper Port terminal and dredging of the Savannah River, for example.
  - Property Owners Association-level communications and planning support, including post-project monitoring and reviews, need to be improved at OCRM.
  - The beach permitting process needs to be streamlined to reduce the time it takes to receive a permit and commence work. This suggestion applied to renourishment projects, erosion control, sand scraping, and emergency orders.
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**Question 3:**

*Is the state’s policy of “retreat” from eroding beaches well understood by local communities?*

- a) Has the policy of retreat been implemented over the past two decades?*
- b) What are the challenges to retreat, and how might they be overcome?*
- c) Are the state’s beachfront “baselines” and “setback areas” effective means of:*
  - *Encouraging retreat*
  - *Reducing reliance on erosion control structures*
  - *Reducing risks to coastal communities, and/or*
  - *Maintaining the health of the beach/dune system*

**Some attendees suggested that:**

- The forum attendees generally agreed that the state’s policy of retreat is *not* well understood by local communities. The key uncertainty surrounds the long-term goal of retreat.
- Preservation of the health of the beach/dune system should be the goal, not retreat.
  - But is retreat inevitable with chronic erosion?
- The practice of retreat in SC is not well understood, even if the concept is.
- There are many challenges to retreat, including:
  - Political will
  - Property rights
  - Shallow beachfront lots with little room left to move landward
  - Local zoning regulations (street setbacks, etc.)
  - Availability of land to relocate structures to

- Currently, instances of retreat seem to be on a case-by-case basis or storm driven rather than a wholesale removal of structures from the setback area.
  - Retreat is primarily an economic decision, so local tax revenues must be considered.
  - Retreat should be more locally implemented, since a “one size fits all” approach for the entire SC coast is not practical.
  - The environmental impacts of beachfront structure abandonment should be emphasized.
    - Demolition, jurisdiction for removal of materials.
  - It is important to be consistent over time in both the implementation of the retreat policy and the methodology of establishing baselines and setback lines.
    - Regulatory jurisdiction definitions along the beach need to be clarified (e.g. beach vs. beach/dune system, etc.)
    - Projected sea level rise should be included in the calculation of the setback line.
  - The state’s beachfront baselines and setback lines have helped protect the health of the beach/dune system.
  - Some participants believed that moving the regulatory “baseline” seaward is not consistent with a retreat policy, but others believe this seaward movement should be allowed (as it is under current regulations).
  - The retreat policy has been implemented over the past two decades in the following situations:
    - Some development along the beachfront has avoided the entire setback area.
    - Structures larger than 5,000 square feet are not allowed within the setback area.
    - Some structures have been moved further landward on a lot.
  - There are complexities in property law regarding ownership between Mean High Water and accretion through natural or artificial means that should be addressed.
  - Active relocation programs are needed and would require funding mechanisms through FEMA and/or other agencies.
  - Outreach and education (including real estate disclosure) would help local communities and property owners to understand the various permitting authorities, jurisdictions, and regulations in the coastal zone.
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**Question 4:**

***Are estuarine or “sheltered” coastlines facing similar threats from migrating shorelines, rising sea levels, coastal storms, and encroaching development?***

- a) If so, are present management authorities and planning activities sufficient in comparison with beachfront areas?***
- b) Do bulkheads along these shorelines present similar issues to those associated with beachfront seawalls? Are there better alternatives?***

**Some attendees suggested that:**

- The forum attendees generally agreed that *yes*, estuarine coastlines are facing similar threats from migrating shorelines, rising sea levels, coastal storms, and encroaching development.
  - Some attendees believe that estuarine coastlines are under a greater immediate threat now since most of the ocean shoreline is built out and the desire to build on estuarine coastlines is increasing.
- Like the ocean shorelines in the state, estuarine shorelines do not have enough public access to support the growing coastal population.
- The implications of sea level rise on marshes and estuarine shorelines are unclear.
- Erosion processes along estuarine shorelines are poorly understood.
  - How much erosion is caused by runoff, development, and boat traffic vs. natural processes?
- There was some disagreement over whether present management authorities and planning activities related to estuarine shorelines are sufficient.
- Local plans don't currently include sea level rise considerations for development along estuarine shorelines, but they should.
- Local governments need more state-level information and technical assistance for shoreline planning.
- The state should encourage research to study salt marsh/tidal creek systems to understand estuarine shoreline change more fully and derive more effective solutions than hard erosion control structures.
- Erosion hotspots from boat wakes need to be identified, and “no wake zones” need to be enforced.
- The state may not have the resources to enforce bulkhead regulations for all of its estuarine shorelines, so existing policies should be applied in consistent fashion at the local level.

- There is no need for a state vegetative buffer zone policy along estuarine shorelines, and the local governments should establish and enforce their own buffer rules. There was some disagreement within the group on this topic.
    - Others believe that a state buffer/setback rule is necessary to ensure consistent application since there are inconsistencies in bulkhead regulations, local setbacks, and local buffer rules.
  
  - Increased buffers and setbacks, as well as clustered development further landward of the OCRM Critical Area line, could allow for shoreline change and marsh migration.
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**Public Comment Period (full comments available on audio files at DHEC-OCRM):**

Mr. Rob Rettew of the Hunting Island Beach Preservation Association presented four main points that he would like the Shoreline Change Advisory Committee to consider.

- 1) The definitions of “chronic” and “emergency” should be better defined and “acute” erosion events should also be defined and incorporated into regulation.
- 2) In 2007, the SC Department of Parks, Recreation, and Tourism (SCPRT) applied to DHEC-OCRM for a minor renourishment permit for Hunting Island. The permit was recently issued, but the process took 18 months, during which time many of the cabins on the island had to be demolished due to erosion. A well-defined process and timeline for permits is needed so applicants know what to expect.
- 3) Downdrift adverse impacts of groins and renourishment projects should continue to be monitored, and enforcement needs more “teeth.” Currently, downdrift adverse impacts can be identified, but what can be done to mitigate the problem?
- 4) Better studies of nearshore alteration proposals and monitoring are needed. We need better predictions of results to make informed decisions about what to permit along the beachfront.

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Mr. Jeff Atkins believes that public beach access needs to increase to accommodate the growing coastal population in the state. He also believes that beaches should be left in their natural state when possible to avoid environmental impacts, economic ramifications, debris cleanup, and litigation. Sandbags are not a viable erosion control solution because they frequently wash away and pose a major environmental concern, are hard to trace once they are covered with sand, are hard to clean up, and are difficult to determine ownership. Mr. Atkins believes the beachfront baseline and setback line positions should be set on a case-by-case basis and/or revised more frequently because in some instances, the baseline is much further seaward than the primary dune.

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